## ABSTRACT

Regarding a detergent made using fermentation technology and its production method, in a production process of soap, effective microorganisms (EM) and EM-X ceramic powder are added to enhance a saponification degree of fat, strengthen a cleaning power as well, and also to realize a detergent capable of proliferating effective microorganisms in sewage water after washing and cleaning the sewage water, and exhibit an effect as a water purification material after washing. On selecting microorganisms, as a living organism playing a starter role in an environmental purification process, in particular, effective microorganisms (EM) consisting mainly of facultative anaerobic lactic acid bacteria, yeast and photosynthetic bacteria and EM-X ceramic powder are introduced in a production process of soap, thereby, a treated material obtained according to the present invention exhibits an environmental purification effect as a substrate of benign microorganisms or a microorganism material.